

VISION IN THE DARKENED ROOM: SCIENCE AND SPIRIT IN THE ART OF  
GEORGIANA HOUGHTON

by

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(Under the Direction of Nell Andrew)

ABSTRACT

Deeply enmeshed in the Victorian Spiritualist community, artist and medium Georgiana Houghton (1814-1884) participated in séances and produced abstract watercolors years before the canonical rise of non-objective painting. The emergence of modern Spiritualism coincided with a period of rapid scientific and technological advancement, and Houghton's autobiographical archive documents her interest in emerging visual and spatial technologies and philosophies. In addition to her relationship with inventor and social reformer Rev. Johnathan Murray Spear (1804-1887) and electrical engineer and telegraph technician Cromwell Varley (1828-1883), she was versed in the *Transcendental Physics* of Johann Karl Friedrich Zöllner (1834-1882). Drawing from her record as well as scholarship on telegraphy, electricity, and theories of retinal afterimages, catalogued by physiologist Jan Evangelista Purkinje (1787-1869), this thesis places Houghton's materialization of the unseen within a lineage of emerging nineteenth century thought surrounding invisible phenomena.

INDEX WORDS: Georgiana Houghton, Nineteenth-Century, Spiritualism, Art History, Abstraction, Victorian, Medium, Science, Technology, Optics, Telegraphy, Jan Evangelista Purkinje, Johnathan Murray Spear, Cromwell Varley, Johann Karl Friedrich Zöllner

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## TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS .....	iv
1 INTRODUCTION .....	1
2 ‘FOR THE EDIFICATION OF OTHERS’: SCIENCE AND SPIRIT.....	8
3 ‘THE EVER WATCHFUL EYE’: SIGHTLESS VISION AND RETINAL AFTERIMAGES.....	11
4 ‘THE HAND OF THE LORD’: DIVINING DIAGRAMMATIC ABSTRACTION.....	15
5 ‘THE INSPIRER. THE MATHEMATICAL. THE SUGGESTOR’: TELEGRAPHY AND OCCULT ABSTRACTION.....	20
6 ‘THE ALL-PERVADING PRESENCE OF GOD’: MATERIALIZING THE FOURTH DIMENSION .....	25
7 ‘WORKS OF ART WITHOUT PARALLEL IN THIS WORLD’ .....	31
BIBLIOGRAPHY.....	33
IMAGES.....	35

## INTRODUCTION

In an example of painterly abstraction ahead of its time, British artist and medium Georgiana Houghton's (1814-1884) *The Eye of the Lord* (1862) (figure 1) transports the viewer to an abstract landscape seemingly unattached from the realities of the material world.<sup>1</sup> This small watercolor and gouache work is defined by vivid washes of color and disorienting patterns of curving lines that continuously loop and overlap one another. The composition contains an ecstatic movement, each line's rhythm leads the eye to dance across fields of color. While visually abstract, *The Eye of the Lord* captures a reality only visible to Houghton. Produced while the artist was connected to the spectral plane, the work materializes what she believed to be theological and spiritual facts.<sup>2</sup> This piece, along with 154 other small abstract works on paper, was part of a corpus exhibited at London's New British Gallery at 29 Bond Street in May of 1871.

Of late, Houghton has gained the attention of art historical scholars after a solo exhibition of her work at The Courtauld, in 2016, and her inclusion in the Centre Pompidou's 2021 survey exhibition, *Women in Abstraction*, as well as several smaller shows focused on the intersection

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<sup>1</sup> Throughout this paper I will use the term abstract to describe Houghton's non-figurative work, but as Rachel Oberter points out in her article on Houghton the term abstract was not used to describe art during Houghton's lifetime. Though I use the term as an aesthetic descriptor, Houghton would not have referred to her works as such. For more see, Rachel Oberter, "Esoteric Art Confronting the Public Eye: The Abstract Spirit Drawings of Georgiana Houghton," *Victorian Studies* 48, no. 2 (2006): 222.

<sup>2</sup> Biographical information comes from Georgiana Houghton, *Evenings at Home in Spiritual Séance: Prefaced and Welded Together by A Species Of Autobiography, Frist Series*, (London: Trubner & Co., Ludgate Hill, 1881), Georgiana Houghton, *Evenings at Home in Spiritual Séance: Welded Together by a Species of Autobiography, Second Series*. (London: E.W. Allen, 1882). and Simon Grant, Lars Bang Larsen, Marco Pasi, and Barnaby Wright. *Georgiana Houghton: Spirit Drawings*. ed. Ernst Vegelin van Claerbergen (London: The Courtauld Gallery, 2016), published in tandem with the first solo exhibition of Houghton's work since her original exhibition in 1871.

between spirituality and art.<sup>3</sup> This recent surge in interest can be traced directly to scholarly and public attention on artists like Hilma af Klint who belatedly came to prominence following the Los Angeles County Museum's 1986 landmark exhibition *The Spiritual in Art: Abstract Painting 1890-1985*. This same show concretized a connection between occultism and the evolution of abstraction.<sup>4</sup> Houghton is often discussed in the same manner as af Klint, due to their common arrival at abstraction via artistic occult exploration. Yet, Houghton was creating work over thirty years earlier than af Klint, and prior to the advent of Theosophy in 1875. Indeed, Houghton's work as a spirit painter was already familiar within early theosophical circles as founder Helena Petrovna Blavatsky referenced the Bond street exhibition in her seminal text, *Isis Unveiled* (1877).<sup>5</sup> The scholarship surrounding af Klint, as well as research into the emmeshed occult and scientific foundations of modern art by scholars like Linda Dalrymple Henderson, has allowed for a reexamination of artists like Houghton, who used occult practice to visualize the invisible phenomena that haunted the psyches of both artists and scientists in the latter half of the nineteenth century.

*The Exhibition of Spirit Drawings in Watercolours* was self-produced by Houghton and chronicled ten years of her artistic occult exploration. The works were hand framed and arranged with meticulous attention to detail. In the weeks leading up to her exhibition Houghton engaged in a publicity campaign. She produced posters and fliers that she circulated across London and

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<sup>3</sup> For more on these recent exhibitions see Grant, *Georgiana Houghton: Spirit Drawings*. and Christine Macel, Karolina Ziębińska-Lewandowska, Centre Georges Pompidou, and Museo Guggenheim Bilbao. *Elles Font l'abstraction*. Paris: Éditions du Centre Pompidou, 2021.

<sup>4</sup> See exhibition catalogue, Maurice Tuchman, Judi Freeman, et al, *The Spiritual in art: Abstract Painting 1890-1985*, ed. Maurice Tuchman (New York: Abbeville Press, 1986).

<sup>5</sup> Helena Petrovna Blavatsky, *Isis Unveiled* (New York: J.W. Bouton, 1877), I, 601.

purchased advertisements in the Times and smaller periodicals.<sup>6</sup> For a period of nearly four months, Houghton attended the gallery daily from 10am to 5:30pm, acting as interpreter and gallery guide.<sup>7</sup> Armed with a magnifying glass with which she demonstrated the minute detail and precision of each work, Houghton mediated visitors' encounters. While she made only a single sale during the exhibition's run, the show was widely attended by both the public and distinguished members of the clergy, scientists, gallerists, and artists, including satirist Florence Claxton and American Sculptor William Wetmore Story.<sup>8</sup>

*The Exhibition of Spirit Drawings in Watercolours* charted a linear progression. In the introduction to her catalogue she explained, "I have numbered the drawings chronologically for a double purpose. In the first place the character of the work is so totally unlike all mortal experience, that the eye, even of an artist, will better appreciate the later ones by being led up to them by the gradual changes of style, and secondly, because the spiritual significance deepened in proportion with my own development."<sup>9</sup> For Houghton this organization was crucial, and so too will it be in this paper.

The Bond Street exhibition demonstrates that while her work was deeply personal, Houghton also saw its function as both art and evidence: evidence of a Christian afterlife, evidence of the ability to commune with the dead, and evidence of an unseen reality. Indeed, the

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<sup>6</sup> Jeff Stewart, "Georgiana Houghton Biography: A flowering of Spirit," in *Georgiana Houghton, a Gift from Spirit, Catalogue of Works Held at the Victorian Spiritualists' Union*, ed. Jeff Stewart, (Victoria, Australia: Victorian Spiritualists' Union, 2020), 196.

<sup>7</sup> Houghton, *Evenings at Home: Second Series*, 79.

<sup>8</sup> Houghton, *Evenings at Home: Second Series*, 93.

<sup>9</sup> Houghton, *Exhibition of Spirit Drawings in Watercolours at the New British Gallery by Miss Houghton through whose mediumship they have been executed*, introduction. The exhibition catalogue was self-produced, an image of this introduction in the catalogue can be found in the collection of the Victorian Spiritualist Union. For more see Lorraine Lee Tet, Alan Bennett, Jeff Stewart, et al, *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. (North Melbourne: Victorian Spiritualists' Union, 2020).

verso of each work furthered its evidentiary purpose; each descriptor served as a record of the object's creation and a chronicle of the artist's encounter with the spectral realm. The rise of Spiritualism in Britain coincided with a period of rapid scientific and technological advancement, and Houghton's autobiographical archive documents her interest in emerging visual and spatial technologies and philosophies. In addition to her relationship with inventor and social reformer Rev. Johnathan Murray Spear (1804-1887) and electrical engineer and telegraph technician Cromwell Fleetwood Varley (1828-1883), she was versed in the *Transcendental Physics* of Johann Karl Friedrich Zöllner (1834-1882). Drawing from her record as well as emerging nineteenth-century thought surrounding invisible phenomena like telegraphy, electricity, and retinal afterimages, this paper places Houghton's oeuvre within a broader history of the intersection of art, Spiritualism and science in the nineteenth century. In tracing her progression as an artist over the ten years leading up to her solo exhibition, this project connects scientific modes of representation and cultural interest in the scientific invisible with the aesthetics and ethos of Houghton's materialization of the spectral unseen.<sup>10</sup>

The seventh of twelve children, Georgiana Houghton was born in 1814 in Las Palmas, Gran Canaria. During her childhood, her middle-class family moved to London, where they endured a period of financial strife and lived in a kind of genteel poverty.<sup>11</sup> While little is known about the particulars of her early life, Houghton trained as an artist and became an early adopter of photography.<sup>12</sup> Houghton, like many others in this period, was intimately affected by the high

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<sup>10</sup> There is no doubt that for Houghton these works were the direct result of spirits guiding her hand; she did not understand herself as their sole author. However, for the purposes of this paper I put aside notions of spectral authorship.

<sup>11</sup> Sara Williams, "Introduction," in Georgiana Houghton, *Evenings at Home in Spiritual Séance: Second Series*, ed. Sara Williams (Brighton: Victorian Secrets, 2013), 5.

<sup>12</sup> Houghton, *Evenings at Home: First Series*, 63.

childhood mortality rate, and shorter life expectancy of the nineteenth century. Early in life she lost multiple siblings and later three close family members within the span of a year.<sup>13</sup> In 1851, after the passing of her younger sister Zilla, who also trained as an artist, Georgiana renounced art and entered a prolonged period of mourning and seclusion. Haunted by the specter of death which followed her throughout her life, Houghton sought a connection with the afterlife, one that her conservative Anglican upbringing could not provide.<sup>14</sup> In 1859, still mourning the death of Zilla, Houghton's cousin suggested she meet with her neighbor, a practicing Spiritualist and medium referred to throughout Houghton's autobiography as Mrs. Marshall.<sup>15</sup> This encounter changed the direction of the artist's life, the remainder of which she dedicated to spreading the gospel of Spiritualism.

The modern Spiritualist movement began to take shape in 1848 when the infamous Fox sisters shared reports of supernatural encounters at séances held in their New York farmhouse.<sup>16</sup> High mortality rates and violent political instability prompted citizens of the young American nation to seek solace beyond the material world. Mediums, like the Fox sisters who touted an ability to bridge the divide between the living and the dead, answered this call. The Fox sisters soon took their séances on tour, and within a decade Spiritualism had become both a popular pastime and belief system across the West and was adopted in England during the latter half of the nineteenth century.<sup>17</sup> Spiritualism became a fringe Christian movement, combining Catholic

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<sup>13</sup> Jeff Stewart, "Georgiana Houghton Biography," 196.

<sup>14</sup> Houghton, *Evenings at Home: First Series*, 1.

<sup>15</sup> Houghton, *Evenings at Home: First Series*, 1.

<sup>16</sup> Ronald Pearsall. *The Table-Rappers: The Victorians and the Occult*. (United Kingdom: Sutton Publishing, 2004), 55.

<sup>17</sup> For a survey of Victorian Spiritualism see Sarah A. Willburn, and Tatiana Kontou, *The Ashgate Research Companion to Nineteenth-Century Spiritualism and the Occult*. (Farnham, Surrey, England: Ashgate, 2012). For look into later Victorian Occultism see also, Alex Owen, *The Place of Enchantment: British Occultism and the Culture of the Modern* (Chicago, Ill: University of Chicago Press, 2004).

belief in miracles, archangels, and saints with cultural understandings of ghosts and mesmerism.<sup>18</sup> The Victorian séance took many forms, yet the most common iteration relied on sensory manipulation. As practitioners entered the darkened room of the séance, they were transported and seduced by the possibilities of the unknown. A medium facilitated contact with the spirit realm, often aided by the sounds of furniture moving or knocking, and the miraculous appearance of objects, images, or writing. Whether as a form of entertainment or as a serious attempt at contact with the dead, the séance functioned as theatre, temple, and eventually laboratory.

Mediumship, the séance, and broader Spiritualism offered a personal, spiritual, and creative freedom that reignited Houghton's interest in art.<sup>19</sup> She soon became a prominent figure within the Spiritualist community, exhibiting her spirit drawings to the public and eventually publishing two books surrounding her practice. Houghton's fervor for God and connection to the spirit world led her to an almost obsessive artistic practice. Initially her spirit drawings were created with the use of a planchette, a heart shaped instrument with two wheels and a pencil used to facilitate the practice of automatic writing.<sup>20</sup> The planchette and pencil were soon replaced by watercolor, gouache, pens and ink. Over a period of twenty-five years Houghton dedicated herself to the production of hundreds of abstract images, yet only forty-six known works have

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<sup>18</sup> Rachel Oberter has highlighted a lack of research regarding the Catholic undertones of Spiritualism. This area of inquiry is especially complex due to the Spiritualism's popularity in the Protestant majority nations like the United States and England. See Oberter, "Esoteric Art," 231.

<sup>19</sup> For more on the freedoms afforded to women through Spiritualism see Alex Owen, *The Darkened Room: Women, Power, and Spiritualism in Late Nineteenth Century England*. (Camden Town, London: Virago, 1989). See also, Amy Lehman, *Victorian Women and the Theatre of Trance: Mediums, Spiritualists and Mesmerists in Performance*. (Jefferson, N.C: McFarland & Co., 2009).

<sup>20</sup> The term "automatic writing" was not in use during this period but has been retroactively applied to this practice.

survived.<sup>21</sup> These remaining works not only offer insight into Houghton's artistic development and missionary aims, they simultaneously speak to the era's climate of occult exploration in which scientists and artists alike pushed the boundaries of optical vision and attempted to materialize the unseen.

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<sup>21</sup> Simon Grant and Marco Pasi, "Works of Art Without Parallel in This World' Georgiana Houghton's Spirit Drawings," in *Georgiana Houghton: Spirit Drawings*. ed. Ernst Vegelin van Claerbergen (London: The Courtauld Gallery, 2016), 21.

‘FOR THE EDIFICATION OF OTHERS’: SCIENCE AND SPIRIT

At the beginning of her artistic occult development Houghton’s abstracted paintings still conveyed a clear subject matter. Her works feature fruits, flowers, and plants, often manipulated and distorted until they resemble their original nature only in the most abstract sense. They demonstrate an interest in the study of naturalism and flora as spiritually significant substances.<sup>22</sup> In her memoir, *Evenings at Home in Spiritual Séance*, Houghton repeatedly references flowers or fruits that appeared during séances. In this way, her depictions of flora were a literal reference to spectral manifestations and would have been a familiar signifier of otherworldly communication to her Spiritualist audience.<sup>23</sup> In *Flower and Fruit of Henry Lenny* dated August 28<sup>th</sup>, 1861 (figure 2), two large pink petals emerge from the bottom right corner amidst a bed of foliage that surrounds the composition’s perimeter. In the middle of the page a sprig of leaves, created in a blue-green watercolor, lies atop another enlarged yellow and pink petal. These lighter elements are dominated by a meandering vine that overlays the surface from edge to edge, looping over and under each element in the work and providing a sense of depth to the otherwise flattened composition. While this arrangement presents an aesthetically pleasing harmony of

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<sup>22</sup> Houghton speaks of fruits and flowers materializing during Seances throughout her memoirs, for her specific discussion of “spirit fruits” and “spirit flowers” see, Houghton, *Evenings at Home: Frist Series*, 25-26.

<sup>23</sup> Houghton also speaks to manifestations of fruit and flowers, in her testimony at the London Dialectical Societies’ summit on Spiritualism. She testified that the following items were manifested by spirits during various séances, “a banana, two oranges, a bunch of white grapes, a bunch of black grapes, a cluster of filberts, three walnuts, about a dozen damsons, a slice of candied pine apple, three figs, two apples, an Onion, a peach, some almonds, four very large grapes, three dates, a potato, two large pears, a pomegranate, two crystallised greengages, a pile of dried currants, a lemon, and a large bunch of beautiful raisins, which, as well as the figs and dates.” For her full testimony see, London Dialectical Society, *Report on Spiritualism of the Committee of the London Dialectical Society*, (London: Longmans, Green, Reader, and Dyer, 1871), 153-154.

color and form, Houghton's practice of adding text to backs of her works expands the painting's didactic purpose.

On the verso of this work, Houghton recorded the following:

“It may be as well to take this opportunity of inculcating upon Georgiana that these drawings are not intended only to contribute to her happiness (which I well know they do, being the flowers and the fruit, of those who she has loved and honored) but for the edification of others, so that she must avail herself of all occasions to show them to those who will take an interest either in Spiritualism, or in the individuals whose characters have been portrayed in these plants, so that the talents lent to her by her Lord may indeed have been productive of the results for which it was granted.”<sup>24</sup>

Houghton establishes that works like this one function as both an educational tool and an aesthetic object, meant to spread the gospel of Spiritualism and prove a kind of contact with the other side.

Before her public exhibition Houghton often invited others into her home to view her spirit drawings. When visitors arrived, they were supplied with a pair of knitting needles which acted as an intermediary between the viewer and the work. She explained “I am always careful that there shall be if possible no human intermixture besides my own, by never allowing them to be touched by other fingers... although I know that they sometime consider it a whim on my part, and cannot conceive that a mere touch can leave anything behind which might even remain ineffaceable.”<sup>25</sup> Houghton believed that these works contained a kind of spiritual potency. There was something sacred and essential in the fact that they had been created by her hand alone. Houghton's fear of contamination also tells us she saw these works as scientific evidence of spiritual presence rather than simply as precious works of art.<sup>26</sup> Her early experience with photography and oil paint exposed her to the use of harsh odorous substances. She wrote that just

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<sup>24</sup> Verso of *Flower and Fruit of Henry Lenny*, 1861

<sup>25</sup> Houghton, *Evenings at Home: Second Series*, 239.

<sup>26</sup> Houghton, 239.

as a substance like turpentine taints the vessel in which it is held so that no matter how one scrubs the cup the smell of turpentine remains, so too would the simple touch of a viewer forever mar her work, damaging or augmenting the spiritual efficacy of the piece. Houghton points to an article in the July 1869 edition of *The Edinburgh Review* which recounts a certain Dr. Tynall's experiments on "the absorption exerted on radiant heat by minute quantities of gaseous matter."<sup>27</sup> These experiments demonstrated to Houghton that molecules invisible to the naked eye could linger and taint an object after exposure.<sup>28</sup> She claimed that this article was included in her book not for its scientific but for its spiritual value. For Houghton the line between the scientific and the spiritual was blurred. Rather than two diametrically opposed ideals she understood the two terms as cooperative means of measuring and understanding the world. This is perhaps best demonstrated by her account of a guest's response at her 1871 exhibition. She writes, "one of my visitors, after an intensely minute study of the pictures, told me that they had an especial interest for him, for that he was a microscopist, and that the effects produced exactly resembled the wonders revealed by the microscope, but invisible to the unaided eyesight."<sup>29</sup> This encounter bolstered Houghton's belief that her work was capturing a reality only visible through the aid of technology, but was nevertheless physically real. Moreover, this interaction speaks to the centrality of the eye and vision more broadly in her works. By creating a work like *Flower and Fruit of Henry Lenny* that made visual the séance's manifested ephemera, Houghton's early works were the first step in a project which aimed to materialize the realities of an unseen spiritual plane.

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<sup>27</sup> Houghton, *Evenings at Home: Second Series*, 239.

<sup>28</sup> Houghton, 239.

<sup>29</sup> Houghton, 91.

‘THE EVER WATCHFUL EYE’: SIGHTLESS VISION AND RETINAL AFTERIMAGES

As her works became more visually abstract, their symbolic meanings and subject matter remained entirely concrete, for they represented a spiritual, if not corporeal, reality. Houghton’s *The Sheltering Wings of the Most High* (figure 3) was completed on October 2nd of 1862, nearly a year after *Flower and Fruit of Henry Lenny*. Aesthetically, the dissimilarities between these works demonstrate a rapid stride towards abstraction in Houghton’s practice. The composition is composed of primary colors: reds, blues, and yellows. Brushstrokes swirl and overlap, intersecting in a repetitive pattern that mimics the smooth lines and concentric circles created by a séance’s planchette. These lines ebb and flow, becoming more concentrated towards the center of the composition. On the right side of the image the colors mesh, the tone becomes deeper, shadowed, and the lines more difficult to discern. The top left of the page is lighter and more open, the brushstrokes farther apart, allowing the page and the viewer’s eye space to breathe. The center of the composition features white spectral linework that is thinner and more organic. These marks stand out in their delicateness, floating as if composed of smoke or ether atop the heavy repetitive nest of blues and reds that darken the right side of the work. The thin white lines create a bright spot of light that bursts over the busy composition. Their arrangement is startlingly similar to the vascular structure of the anatomical eye seen in illustrations of retinal afterimages. Indeed, Houghton’s *The Sheltering Wings of the Most High*, can be read as a transposition of nineteenth century fascinations with the retinal afterimage. As such, when Houghton revisits the theme of the eye in later paintings, these same white brushstrokes appear.

In *Techniques of the Observer* Johnathan Crary established the centrality of the study of optics in the making of visual modernity. More specifically, Crary determined that nineteenth

century scholarship surrounding the retinal afterimage helped codify shifting understandings of the mechanics of vision.<sup>30</sup> Today we understand retinal afterimages as the result of an optical illusion seen behind closed eyes following the removal of stimuli that creates a persisting retinal impression. While evidence of this phenomenon was recorded as far back as antiquity, throughout most of history these temporary images were largely understood in terms of spectral or supernatural encounters.<sup>31</sup> In the eighteenth and nineteenth centuries they began to be investigated as a part of the emerging field of optics.

By the beginning of the nineteenth century, Goethe and others had begun to classify retinal images in terms of “optical truths.”<sup>32</sup> Instead of a kind of trick of the eye, or an issue of perception, these non-corporeal visions became an accepted aspect of human sight. In the spirit of enlightenment materialism and empirical rationale, Goethe and physiologists who agreed with him determined that optical illusions did not exist, instead whatever the eye experienced was an “optical truth.”<sup>33</sup> According to Crary, “the after image...posed a theoretical and empirical demonstration of autonomous vision, of an optical experience that was produced by and within the subject.”<sup>34</sup> This “subjective vision” established the scientifically grounded existence of vision without sight.

Houghton’s white skeins across her eye paintings have a corollary in the scientific literature. In 1823 the physiologist Jan Purkinje produced the first visual catalogue of the retinal afterimages. Recording duration, modulation, and triggering stimuli, Purkinje was the first to

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<sup>30</sup> Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Boston: MIT Press, 1990), 97-104.

<sup>31</sup> Crary, *Techniques of the Observer*, 97.

<sup>32</sup> Crary, 97.

<sup>33</sup> Crary, 98.

<sup>34</sup> Crary, 98.

objectively illustrate these experiences in a series of scientific illustrations (figure 4).<sup>35</sup>

Purkinje's work was foundational to the study of optics, and today the phenomena are often referred to as Purkinje images. The illustrations, which were originally created in color, show a wide range of subjective optical phenomena that capture the play of light and color that flashes behind the eyes following exposure to specific stimuli. The images are abstract and varied. Some feature segmented graphic lines, vibratory wheels of color, and woven grids, while others follow the organic curves of the eye's capillaries. Out of context, this grouping of images appears more like the sketchbook of an abstract artist rather than the illustrations of a physiologist.

The period's interest in the spectral appearance of the retinal afterimage is especially pertinent to Houghton's practice when considering the sensory deprivation of the séance. Light, or rather the absence of light played a crucial role in Spiritualism. Under the cover of darkness mediums and mesmerists sought connection with an unseen force. Noam Elcott has established the centralized role of darkness in modern art and broader media.<sup>36</sup> With the advent of electric lights and the gas lamps that preceded them, darkness became a manageable entity, and the purposeful sensory deprivation of the séance was a primary example of what Elcott deems "controlled darkness."<sup>37</sup> For many mediums darkness was an essential element in the performance of the séance. Participants began this ritual by entering a darkened room, therein they surrendered their sense of vision and its supposed objectivity. In the darkness one's eyes were no longer reliable. Thus, vision coming from within the observer took precedent as the eye

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<sup>35</sup> For more on Purkinje see, Nicholas J Wade, Josef Brožek, and Jiří Hoskovec, *Purkinje's Vision: The Dawning of Neuroscience*. (New Jersey: Lawrence Erlbaum Associates, 2001).

<sup>36</sup> Noam Milgrom Elcott, *Artificial Darkness: An Obscure History of Modern Art and Media* (Chicago: University of Chicago Press, 2016).

<sup>37</sup> Elcott, *Artificial Darkness*, 115.

sought to adjust to the absence of light. This rapid transition from light to dark left participants haunted by the persisting retinal impression of their last sight.

Returning to Houghton's *The Sheltering Wings of the Most High*, the artist's organic thin white lines recall the capillaries of the eye, the small blood vessels that deliver oxygen and nutrients to the sensorial organ. Such designs repeatedly appear in depictions of retinal afterimages like Purkinje's, in which the eye's vascular structure is seen mapped onto the closed lids of the observer (see figure 4). Similar faint white brushstrokes sit atop the central curved red eye in Houghton's *The Eye of God*, produced on September 25<sup>th</sup> of 1862 (figure 5). On the verso of the work Houghton describes the composition as a spiritual understanding of sight, "The Ever watchful Eye looking down on man's most trifling acts as well as his more important ones... The Eye understood rather than expressed."<sup>38</sup> Here the white lines evoke the process of entering a trance, the capillary-like pattern mapped atop the eye suggests the introspective process of mediumship and the closed-eyed channeling necessary for the making of the image. We can imagine the artist as she tightly closes her eyes to reduce outside stimuli, allowing her to enter an interior spiritual plane of consciousness. In the dark she is left with only the imprint of the physiology of her own eyes. Houghton's works can be understood in part as capturing the phenomenon of retinal afterimages, permanently archiving the experience of the séance and the personal experience of channeling in the submergence or emergence from the dark. Works like *The Eye of God* and *The Sheltering Wings of the Most High* materialize the spectral appearance of retinal afterimages and serve to concretize an ephemeral phenomenon.

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<sup>38</sup> Verso of *Eye of God*, September 25<sup>th</sup>, 1862.

‘THE HAND OF THE LORD’: DIVINING DIAGRAMMATIC ABSTRACTION

Over the next two years Houghton’s practice continued to evolve both aesthetically and conceptually. In *Glory be to God*, produced in 1864, Houghton expanded her use of white gouache (figure 6). The page is dominated by looping and spiraling white brush and line-work. The white gouache sits atop a field of red, yellow, and blue. On the right of the page, the gouache is applied in a broad diffused manner, obscuring the nest of chromatic linework behind it. This ghostly veil of white pigment seems to hover over the blue and red tones of the composition’s background. *Glory be to God* deviates from Houghton’s established pattern of text and image. Unlike her more didactic prose, this work’s verso functions as a diagrammatic key (figure 7). Reducing each section of the work to simplified line drawings with succinct labels, she dissects her own symbolism. In this way, the verso acts as a key for visual translation via diagram. Each replicated line drawing and its corresponding identifier becomes a code, presenting the viewer with a means of deciphering the original watercolor. While Houghton continues to describe abstract theological notions in her verso text, she engages in a semiotic translation of the work, using images as a means of describing images.<sup>39</sup> The top left section of swirling white lines is reduced to its most basic shape on the verso and labeled “The Cup of Salvation.” The figure eight which surrounds smaller spiral groups at the compositions center is replicated and defined as “The Ear of the Lord,” and “The Hand of the Lord.” Houghton repeats this pattern, labeling all of the main sections of her composition.

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<sup>39</sup> Oberter, “Esoteric Art,” 227.

While *Glory be to God* aesthetically resembles expressive forms of abstraction, Houghton's use of a diagram on the verso aligns more closely with the diagrammatic abstraction that af Klint would later employ in her *Atom Series*.<sup>40</sup> Furthermore, Houghton's diagram precedes a shift towards diagrammatic abstraction recognized in modernists like František Kupka, whose interest in esoteric Buddhist and Theosophical diagramming is credited in his shift towards abstraction.<sup>41</sup> Indeed, the diagram played a pivotal role in the development of non-objective painting. Christine Buci-Glucksman argues, "in contrast to retinal modernist abstraction, the diagram in art presupposes a 'thin' abstraction composed of inflections and virtualities."<sup>42</sup> The diagram has been utilized by artists throughout time as a means of exploring abstract ideas and allowing for order amid chaos. This method of aesthetic translation also follows established norms of scientific illustration and cartography. Diagrammatic renderings such as Houghton's allow for the materialization of non-corporeal ideals. Buci-Glucksman goes on, "The diagram has haunted art from its beginnings to the present day. The clasps and labyrinths of Celtic art, the interlocking patterns of Islamic decoration, and Indian mandalas are all magical diagrams which express, through their infinite figures of divinity, different levels of a real at once sacred, cosmic, and architectural."<sup>43</sup>

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<sup>40</sup> Linda Dalrymple Henderson, "Hilma af Klint and the Invisible in Her Occult and Scientific Context," in *In Visionary: On Hilma af Klint and the Spirit of Her Time*, ed. Kurt Almqvist and Louise Belfrage (Stockholm, Sweden: Bokförlaget Stolpe, 2020), 75.

<sup>41</sup> Robert P. Welsh, "Sacred Geometry: French Symbolism and Early Abstraction," in *The Spiritual in Art: Abstract Painting 1890-1985*, ed. Maurice Tuchman and Judi Freeman, (New York: Abbeville Press, 1986), 80.

<sup>42</sup> Christine Buci-Glucksman, and Josh Wise. "Of the Diagram in Art." *ANY: Architecture New York*, no. 23 (1998): 34.

<sup>43</sup> Buci-Glucksman, "Of the Diagram in Art," 35.

Occult diagrams were also a key component of the more technical work of Spiritualist inventor and former Christian Universalist minister Rev. Johnathan Murray Spear.<sup>44</sup> An eccentric even amongst mystics, Spear was a radical social reformer, fighting for abolition and an end to capital punishment. While Houghton channeled artists, Spear's guides were science minded spirits he called the "Association of Electricizers."<sup>45</sup> Spear believed that electricity was a spiritual element divined through séances and channeling sessions, and that these new electrical technologies would allow for greater social and spiritual freedoms.<sup>46</sup> Amid a séance's magnetic and electrical forces, practiced mediums like Spear and Houghton became literal as well as spiritual conduits. Diagrams became an essential tool in transcribing such complex ideas and organizational hierarchies divined through channeling. Spear, for one, adopted the visual language of Copernican astronomy in his spiritualist diagrams, like the "Diagram of the Organization of the Spirit World."<sup>47</sup> Spear's diagrams are aesthetically austere, composed of simple circles, lines, and text. Yet, their structure attempts to organize an entirely nebulous and non-corporeal realm. This kind of cosmic imagery also inspired later abstract painters, who adopted these techniques to materialize other unseen forms.<sup>48</sup>

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<sup>44</sup> All biographical information on Spear comes from John B. Buescher, *The Remarkable Life of John Murray Spear: Agitator for the Spirit Land*. (Notre Dame, Indiana: University of Notre Dame Press, 2006).

<sup>45</sup> Houghton describes encounters with artistic spirit guides throughout her autobiographical record and on the verso of select works. Of note are encounters with Titian, transcribed the back on *The Eye of The Lord*, September 22<sup>nd</sup>, 1862, and Antonio da Correggio on *The Eye of God*, September 25<sup>th</sup> of 1862. As stated previously this paper does not engage with notions of channeled authorship. For more on Spears's guides see Buescher, *The Remarkable Life of John Murray Spear*, 96-98.

<sup>46</sup> See Buescher, *The Remarkable Life of John Murray Spear*, 2-3. See also Irene Cheng, "Models, Machines, and Manifestations: The Spiritualists' Circular Utopias," in *The Shape of Utopia: The Architecture of Radical Reform in Nineteenth-Century America*, (Minneapolis: University of Minnesota Press, 2023), 225.

<sup>47</sup> Cheng, "Models, Machines, and Manifestations 225.

<sup>48</sup> Maurice Tuchman, "Hidden Meaning in Abstract Art" in *The Spiritual in Art: Abstract Painting 1890-1985*, ed. Maurice Tuchman and Judi Freeman, (New York: Abbeville Press, 1986), 24.

Houghton first met Spear and his second wife, woman's rights advocate Caroline Hinckley, during the couple's 1863 trip to London. Upon their meeting she produced a now lost spiritual portrait of Mrs. Spear, which was included in the 1871 exhibition. Spear and his wife formed a close relationship with Houghton, whom he crowned the "Holy Symbolist."<sup>49</sup> This designation, later modified to the "Sacred Symbolist," stayed with Houghton for the remainder of her artistic career and often appears in descriptions of her work. It is possible that Spear introduced Houghton to spiritualist diagramming, as she began using this semiotic tool in her explanatory versos following 1863. Houghton's relationship with Spear further substantiates her awareness of the intersection between Spiritualism and science. In creating a diagram Houghton further pushed her artwork into the realm of scientific evidence wherein the verso acted as an aid for visual translation.

In the catalogue for the 1986 LACMA exhibition, *The Spiritual in Art*, Maurice Tuchman posits that spiritual abstraction emerged in accordance with five impulses: cosmic imagery, vibration, synesthesia, duality, and sacred geometry.<sup>50</sup> Houghton's oeuvre engages repeatedly with sacred geometry via the spiral, synesthesia and chromatic symbolism. In her 1871 exhibition catalogue and later in *Evenings at Home*, Houghton included a key to reading her works. Each color she selected had a specific meaning ascribed to it, each pigment assigned an emotional or spiritual value. Chinese orange represented unselfishness, "cadmium, courage; carmine, tenderness; cobalt blue, truth; crimson lake, love; violet carmine, religion; intense blue, decisiveness; aureolin, orderliness."<sup>51</sup> Like Kandinsky, who years later would create his own

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<sup>49</sup> Spear originally called Houghton the "Holy Symbolist" but at some point, this was changed to the "sacred symbolist." See Buescher, *The Remarkable Life of John Murray Spear*, 225.

<sup>50</sup> Maurice Tuchman, "Hidden Meaning in Abstract Art," 32.

<sup>51</sup> This specific list comes from Houghton, *Evenings at Home: First Series*, 312. Her Exhibition catalogue contains a similar key.

synesthetic guide to symbolic color usage, Houghton's key provided the formula to decipher each work's spiritual message.<sup>52</sup> Each color represented a separate theological truth, and in this, all of Houghton's works function as spiritual diagrams of her encounters with the other-side.

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<sup>52</sup> For more on Kandinsky's use of color and his place within the development of abstraction see Peter Selz, "The Aesthetic Theories of Wassily Kandinsky and Their Relationship to the Origin of Non-Objective Painting." *The Art Bulletin* 39, no. 2 (1957): 133.

THE INSPIRER. THE MATHEMATICAL. THE SUGGESTOR: TELEGRAPHY AND  
OCCULT ABSTRACTION

As time progressed the aesthetics of Houghton's works became increasingly abstract. On September 15<sup>th</sup>, 1869 Houghton produced *The Monogram of Cromwell Varley* (figure 8), a spiritual portrait divined through her subject's initials. The page is filled with a nest of tangled linework. Thin brush strokes of gouache and watercolor in blues, marigolds, and reds, mesh together. On the left section of the work these colors meld and create a frenzied darkened web. Throughout the piece Houghton employs a watered-down white pigment with a wider brush. These soft brushstrokes serve to break up the heaviness of the darkened opaque tones, which merge in the outline of the first letter of Varley's monogram: C. The sitter of this spiritual portrait was prominent Victorian electrical engineer, Cromwell Fleetwood Varley, who, along with Spear and Houghton, gave testimony at the Council of the London Dialectical Society, on the 20<sup>th</sup> of July 1871 during the run of her exhibition on Bond Street.<sup>53</sup> In the report published late that same year, all three attested to the reality of spiritual phenomena. This report remains one of the most complete records of the state of British Spiritualism in the Victorian era.

Varley and his wife, both devoted spiritualists, were close associates of Houghton. In *Evenings at Home*, Houghton details multiple seances in which Mrs. or Mr. Varley participated. Her "portraits" of the couple were included in her Bond Street gallery exhibition; in addition to *The Monogram of Cromwell Varley*, she created a now lost *Flower of Mrs Cromwell Varley*, which was likely similar to her aforementioned botanical works. Following the exhibition in a

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<sup>53</sup> For testimonies see, London Dialectical Society, *Report on Spiritualism*, 135, 153, 157.

letter to the editor of *Spiritual Magazine*, Houghton described one of many meetings with Mr. Varley wherein she created a spirit drawing upon his request, asking her guides to materialize his scientific query. She recalls, “Mr. Varley, in the latter end of 1863, put some question with reference to comets (while he and I were sitting alone), and through my hand a drawing was executed, which I did not at all comprehend, but he said he did, and that it answered his question.”<sup>54</sup>

Today, Varley is remembered for his work as an engineer on the team that tested and successfully laid the transatlantic telegraph cables in the 1860s.<sup>55</sup> Amongst historians of physics, Varley is also remembered for his work preceding early understandings of the electron.<sup>56</sup> What’s more, Varley’s family is entrenched within the material history of British occultism and scientific inquiry. His uncle, painter and astrologer, John Varley (1778–1842) was a close friend and collaborator of William Blake.<sup>57</sup> His father, water-colorist and optical instrument-maker, Cornelius Varley (1781–1873) is credited with the invention of both the graphic telescope and the graphic microscope, two instruments which acted as improvements on the camera lucida and camera obscura.<sup>58</sup> Lastly, his cousin John Varley Jr. (1850–1933) would go on to illustrate Theosophists A. Besant and C. W. Leadbeater’s influential book, *Thought Forms*.<sup>59</sup> For Cromwell Varley the spiritual and the scientific were never far apart. It is unsurprising then that

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<sup>54</sup> Houghton, *Evenings at Home: Second Series*, 111-112.

<sup>55</sup> For more on Varley’s legacy and contemporaneous reputation see his 1883 obituary in *Scientific American*, “Mr. Cromwell Fleetwood Varley, F.R.S.” *Scientific American* 49, no. 14 (1883): 216–216.

<sup>56</sup> Richard Noakes, “Cromwell Varley FRS, Electrical Discharge and Victorian Spiritualism.” *Notes and Records of the Royal Society of London* 61, no. 1 (2007): 5.

<sup>57</sup> Edina Adam, Julian Brooks, and Matthew Hargraves. *William Blake: Visionary* (Los Angeles: The J. Paul Getty Museum, 2020), 115. See also Blake’s portrait of John Varley page 135 of the same catalogue.

<sup>58</sup> Noakes, “Cromwell Varley FRS,” 7-8.

<sup>59</sup> Tom Gibbons, one of the first scholars to write about Houghton, proposed her spirit drawings be understood as precursors to Besant & Leadbeater’s *Thought Forms* (1901), which have long been held as influential in the formation of abstraction. See Tom Gibbons, “British Abstract Painting of the 1860’s.” *Modern Painters 1* (2): (1988), 37.

he developed a relationship with Houghton and believed in her ability as an artist capable of materializing scientific evidence of occult experiences.

After the failure of the first Atlantic telegraph cable in 1858, Varley began a crusade to legitimize two parallel projects. The first scheme, a successful construction of a commercial transatlantic telegraph cable, and the second, proof of the ability to commune with the dead.<sup>60</sup> Historian Richard J. Noakes has established a lasting, if not obscured link between the development of the telegraph and the rise of Spiritualism. To the modern reader these two endeavors seem entirely disconnected, yet in the mind of the Victorian public, each represented occult sciences. Just as skeptics attacked the spiritualist concept of speaking with the dead through byzantine signals, critics similarly doubted engineers claims that electricity provided an opportunity to communicate with people across vast distances.<sup>61</sup> To a public naturalized to physical communication delivered by letter, the ability of rapid communication appeared equally esoteric. Whether separated by geographic or spiritual distance, instantaneous communication with those not physically present seemed a supernatural endeavor. Like Samuel Morse's code, which served as the language of the telegraph, mediums communicated with the astral realm in a series of raps. For some, table-rapping was thought to collapse the distance between the terrestrial and the celestial, just as the telegraph had conceptually shrunk physical space.<sup>62</sup> The two practices were also linked linguistically, as spiritualists often referred to communication with the dead as "spiritual or celestial telegraphy."<sup>63</sup>

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<sup>60</sup> Noakes, Richard J. "Telegraphy Is an Occult Art: Cromwell Fleetwood Varley and the Diffusion of Electricity to the Other World." *The British Journal for the History of Science* 32, no. 4 (1999): 421–422.

<sup>61</sup> Noakes, "Telegraphy is an Occult Art," 422.

<sup>62</sup> Noakes, "Telegraphy is an Occult Art," 434.

<sup>63</sup> Noakes, 434.

Varley's joint vocations as electrical engineer and mesmeric healer relied on electricity as a means of communication. In this he found common ground with Houghton, whose life as a spiritualist was similarly defined by a grasp at spiritually distanced communication. During a séance in her home, Spear described Houghton and Varley's shared aims, explaining:

“How great was the work to which she was called, as, through her organism, spirit friends could pour their influence, for her to transmit it to Mr. Varley, whose work it was by his scientific pursuits, to unite nation to nation, and land to land, until the whole world shall be, as it were, bound together.”<sup>64</sup>

For Varley, Houghton became another means of communication, she functioned like the telegraph cables as a conduit, her physical form a medium in which this distanced communication became possible. As such, I posit *The Monogram of Cromwell Varley* may allude to both the conceptual and physical reality of the telegraph, the nest of lines representative of the miles of insulated copper wire necessary for its function. By the time of this work's creation telegraph cables would not have been foreign to someone like Houghton, living in urban London, and aware of Varley's work engineering the subterranean telegraph system and his dedication to making transatlantic telegraphy a reality. Moreover, the verso of the work alludes to Varley's devotion to communication. Houghton lists a group of archangels she determined significant to Varley. She includes not only their names but their spiritual gifts: “The Sent. The Mover. The Reminder. The Sustainer. The Inspirer. The Mathematical. The Suggestor.”<sup>65</sup> These identifiers point to Varley's joint interest spiritual and technological electrical communication and his role as public evangelist for both.

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<sup>64</sup> Houghton, *Evenings at Home*, First Series, 226.

<sup>65</sup>From the verso of *Monogram of Cromwell Varley*, September 15<sup>th</sup>, 1869.

Choosing a monogram for her spiritual portrait is also conceptually significant. The telegraph, like a monogram, was communication reduced to its most basic components. Language is itself a form of abstraction, in that it is only tied to the material world through association, the word itself serves only as a symbol. Telegraphic communication further reduced these linguistic signals. In *The Monogram of Cromwell Varley* Houghton explores another form of abstraction, this time through linguistic subtraction. In compressing Varley's spiritual likeness to his initials, Houghton engages in a form of both visual and conceptual abstraction, while simultaneously referencing the simplified language of the telegraph and the scientific reality of electrical communication.

THE ALL-PERVADING PRESENCE OF GOD: MATERIALIZING THE FOURTH  
DIMENSION

A year after the creation of *The Monogram of Cromwell Varley*, Houghton revisited a motif that recurs throughout her corpus, the eye. *The Eye of the Lord* created on 1st September 1870, contains a singular abstracted eye (figure 9). This eye recedes to the back of the composition, covered in layers of looping line work. These frenetic lines evoke a kind of perpetual motion; a lid which is simultaneously closing and opening. This work can be read as a collapsing of time and space; like God himself, this eye exists outside of a single moment. The eyelid is rendered in a thick semi-transparent wash of white. This shape, while not quite opaque, carries a weight seen in her earlier figurative paintings, reminiscent of the brushwork in her botanical watercolors. In this, Houghton calls attention to the organic nature of the eye itself. This may be the eye of God, but it is composed of the same earthly materials as the human eye. As such this work materializes the Christian doctrine that undergirds Houghton's spirit drawings through a tripartite image of God the father in heaven, son on earth, and non-corporeal holy spirit. Existing as both man and divine, and in past and present, Houghton's image evokes a realm atop our own. This work is perhaps the most literal manifestation of Houghton's focus on the distortion of space and vision in both their physical and conceptual manifestations.

Linda Dalrymple Henderson has done extensive work in linking the modernist development of non-objective painting to artists' interest in the fourth dimension as "a higher, unseen dimension of space which might hold a reality truer than that of visual perception... belief in a fourth dimension encouraged bold, formal experimentation by liberating artists from

the domination of three-dimensional visuals.”<sup>66</sup> While Henderson writes about works created in the beginning of the twentieth century, this statement aptly illustrates Houghton’s exploration of extradimensional space. When Henderson approached of Klint’s interest in the science of the invisible, she found the experiments of German physicist Johann Karl Friedrich Zöllner explicitly linked the development of theories surrounding the fourth dimension to the Spiritualist movement.<sup>67</sup> More broadly, Henderson credits Zöllner’s influence in the rise of late nineteenth-century cultural interests in extradimensional space.<sup>68</sup> Houghton too admired Zöllner, describing him in her memoir as among “Englishmen of unquestionable science whose judgment is not limited within the narrow boundaries of their own profession,” commending his openness to Spiritualist phenomena.<sup>69</sup>

While perhaps best known for his work within nineteenth century astrophysics, Zöllner also penned a lesser-known, but esoterically significant exploration of higher dimensions titled, *Transcendental Physics*. Inspired by the wave of Spiritualism that had swept through the whole of Europe, Zöllner looked to the occult as a means of investigating the possibility of extradimensional space.<sup>70</sup> Unexplainable and invisible stimuli, like those produced within the darkened room of the séance, became Zöllner’s focus. He called this new field, “Transcendental Physics.”<sup>71</sup> In the first chapter of his treatise, Zöllner argued that our perception of a three-

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<sup>66</sup> Linda Dalrymple Henderson, “Italian Futurism and ‘The Fourth Dimension.’” *Art Journal* 41, no. 4 (1981): 317.

<sup>67</sup> Henderson, “Hilma af Klint and the Invisible,” 77.

<sup>68</sup> Linda Dalrymple Henderson, *The Fourth Dimension and Non-Euclidean Geometry in Modern Art* (New Jersey: Princeton University Press, 1983) 123-124.

<sup>69</sup> Houghton, *Evenings at Home: Second Series*, 256.

<sup>70</sup> For more on Zöllner’s reception and broader cultural impact see Mark Blacklock, “Knots: Topology, Conjuring, and the Spiritualist Fourth Dimension”, in *The Emergence of the Fourth Dimension: Higher Spatial Thinking in the Fin de Siècle* (United Kingdom: Oxford University Press, 2018).

<sup>71</sup> Throughout this section I use the translated edition of this work, as this is likely the version accessed by Houghton. See, Johann Carl Friedrich Zöllner, *Transcendental Physics: An account of experimental investigations from the scientific treatises of Johann Carl Friedrich Zöllner*. Translated by Charles Carleton Massey, (London: W.H. Harrison, 1880).

dimensional reality was based upon human observation and experience.<sup>72</sup> Therefore, when occurrences like those one might encounter during the performance of a séance contradict the boundaries of that established three-dimensional reality, one is forced to re-examine space itself.<sup>73</sup> Zöllner references Kant who believed that if man were able to imagine the possibility of a fourth dimension, then it logically must exist.<sup>74</sup> Indeed, Zöllner was not the first to conceptualize the prospect of space beyond our three-dimensional reality, but in applying the apparatus of the scientific method to these questions he shifted the study from the realm of the esoteric into that of the scientific.<sup>75</sup> While this project merged spiritual material with scientific observation, Zöllner believed that the ideas which he extracted from the work were strictly scientific.<sup>76</sup>

In *Transcendental Physics*, experiments became more personal and subjective. Human intelligence and agency stood at the basis of this study, as he deemed certain people possessed an inherent sensitivity that allowed them to tap into otherworldly consciousness. Spiritualist mediums were particularly skilled at accessing what he called “inspiration”<sup>77</sup> In a traditional experiment, the experimenter maintains control by tweaking and adjusting the physical apparatus of the experiment. Whereas transcendental physics relies on the medium acting as both experimenter and experiment; all interactions and outcomes are channeled directly through the medium. Moreover, Zöllner believed that spirits and entities which appeared and manipulated the

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<sup>72</sup> This chapter comes from Zöllner’s article titled “On Space of Four Dimensions” originally published in the *Quarterly Journal of Science*, in 1878.

<sup>73</sup> Zöllner, *Transcendental Physics*, 10-13.

<sup>74</sup> Zöllner, *Transcendental Physics*, 38.

<sup>75</sup> Helge Kragh, “The First Curved-Space Universe,” *Astronomy & Geophysics*, Vol. 53, 5 (2012): 5.14.

<sup>76</sup> Kragh, “The First Curved-Space Universe,” 5.14.

<sup>77</sup> Johann Karl Friedrich Zollner, “Zur Metaphysik des Raumes“ *Wissenschaftliche Abhandlungen, Vol. 3*, (Leipzig: Staackmann, 1878), xix.

physical world during séances were the result of a medium's connection to the fourth dimension.<sup>78</sup> For Houghton this manifested in her qualifications as a medium and an artist which made her uniquely qualified to create her spirit drawings. In Houghton's words, "my previous education had been given as a preparation for the work I was to do, and having in former years been accustomed to drawing flowers from Nature, with all their brilliancy of colouring, my brain was already trained to bear what my eye was fitted to receive."<sup>79</sup> For Zöllner, the inventor connects with a kind of collective consciousness as they create new instruments and new means of experimentation. Much like Houghton's artistic aptitude was necessary in producing her works, her skill and intelligence were essential elements in allowing her to tap into a stream of extradimensional communication.

With the assistance of American medium Henry Slade, Zöllner examined the fourth dimension through experiments performed with knots.<sup>80</sup> During séances, spiritually manifested knots were a common physical materialization of spectral encounters. Zöllner observed Slade who, under trance, would call upon the spirits and ask that they produce a knot in a piece of cord bound at both ends to the table (figure 10). Under the cover of darkness seemingly impossible knots were physically manifested. Throughout her autobiographical archive Houghton describes several occasions in which, "the spirits took possession of the handkerchiefs and tied them in various knots, some of them very elaborate."<sup>81</sup> Perhaps the tangled webs of linework in her watercolors evoke these spiritual knots and serve as an attempt at capturing the material ephemera of the séance. Following a similar impulse, Zöllner explains that he kept these knotted

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<sup>78</sup> Zöllner, *Transcendental Physics*, 170-173.

<sup>79</sup> Houghton, *Evenings at Home: First Series*, 23.

<sup>80</sup> For Zöllner's discussion on the extradimensional physics explained through knots see, Zöllner, *Transcendental Physics*, 5-8.

<sup>81</sup> Houghton, *Evenings at Home: First Series*, 149.

cords as physical proof of his encounters, using these spectrally manifested knots, “so as to convince them [skeptics] that not a *subjective* phantasma is here in question, but an *objective* and lasting effect produced in the material world which no human intelligence, with the conceptions of space so far current, is able to explain”<sup>82</sup> Through these experiments Zöllner concluded that the effects produced within séances were the result of interactions with fourth dimensional entities. Houghton’s art functions in much the same way. Her work is not only proof of a spirit, but the lasting evidence from a spiritual encounter. To use the language of *Transcendental Physics*, each work was the three-dimensional remainder of an encounter with a fourth dimensional being.

Zöllner’s work precedes that of Charles Hinton, whose extra-dimensional spatial theories in *A New Era of Thought* (1888) and *The Fourth Dimension* (1904) have been attributed by Henderson as a conceptual framework for the Cubists.<sup>83</sup> Furthermore, John Adkins Richardson posits that Guillaume Apollinaire’s reference to the fourth dimension in his 1913 aesthetic treatise *Les Peintres Cubistes* suggests that he was, “speaking of Cubism as an artistic formulation of Zöllner.”<sup>84</sup> As such, the physicist played a role in the conceptual development of non-objective art.<sup>85</sup> While Zöllner published *Transcendental Physics* after Houghton produced the majority of her oeuvre, his mention in her memoir speaks to her awareness of his work. Moreover, Houghton may have understood his theories on layered dimensions and interactions

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<sup>82</sup> Zöllner, *Transcendental Physics*, 20. For more on the impulse to prove Spiritualist belief true through science see, Peter Lamont, “Spiritualism and a Mid-Victorian Crisis of Evidence.” *The Historical Journal* 47, no. 4 (2004): 897–920.

<sup>83</sup> Linda Dalrymple Henderson, “Mysticism, Romanticism, and the Fourth Dimension,” in *The Spiritual in Art: Abstract Painting 1890-1985*, ed. Maurice Tuchman and Judi Freeman, (New York: Abbeville Press, 1986), 221.

<sup>84</sup> John Adkins Richardson, *Modern Art and Scientific Thought*. (Urbana: University of Illinois Press, 1971), 107.

<sup>85</sup> See also, Tom. H. Gibbons, “Cubism and ‘The Fourth Dimension’ in the Context of the Late Nineteenth-Century and Early Twentieth-Century Revival of Occult Idealism.” *Journal of the Warburg and Courtauld Institutes* 44 (1981): 133-134.

with a spirit realm as a retroactive means of describing her artistic practice. Indeed, Houghton was engaged in a project of visualizing the fourth dimension years before the artists who came to define abstraction would approach these ideas.

As far back as 1862 Houghton used her spirit drawings as a means of visualizing an extradimensional reality. In *The Eye of the Lord*, (September 2<sup>nd</sup>, 1862) the page is filled with repeated abstracted eyes. Their repetition challenges the familiar form. En-masse these shapes lose meaning and become a distorted pattern. Rendered in reds and blues atop flashes of yellow brush strokes, Houghton depicts the human eye from every angle. On the verso of the work, she explains that the composition materializes “The Ever Watchful Eye of The Lord. He Who created all, never slumbers nor sleeps, but is ever overlooking His creatures... I have endeavored to render this idea, by portraying' Eyes in every position and on every part of the drawing; thus showing the All-pervading Presence of God.”<sup>86</sup> While Houghton references a conventional Anglican belief in an all-powerful God, her work serves as an expansion on this theological notion. Using the symbol of the eye, Houghton depicts the omnipresence of God’s vision; an all-knowing, ever-connected network of constant surveillance. This continuous vision speaks to a layered reality, and God as a being capable of existing in both the third dimension and in a spiritual plane stacked atop our own. The repetition of the eye in this work, those mentioned in this paper, and other works lost to time speaks to the centrality of vision in Houghton’s works. Moreover, they address her belief in art as a visual language able to capture the realities of the invisible, and her spirit drawings as an attempt to help others see the unseen.

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<sup>86</sup> Verso of *The Eye of the Lord*, 1862.

“WORKS OF ART WITHOUT PARALLEL IN THIS WORLD”

The legacy of *The Exhibition of Spirit Drawings in Watercolours* speaks to Houghton’s faith in art as a means of communication, both with a viewing public, and with the dead. Yet, non-figurative art’s communicative abilities had limits for Houghton, who eventually turned to spirit photography as a medium more inclined to produce proof of the spirit realm. In the years following the exhibition on Bond Street Houghton stopped using her works as instructional aids. Many surviving works are untitled with no more than a date on the verso. These are fully abstract objects, devoid of any decipherable mimetic allusions, and include a considerably smaller chromatic range, much like the black and white photographs she would go on to produce with Frederick Hudson.<sup>87</sup>

While Houghton’s exhibition may not have ended in a financial or even missionary success, Houghton refused to regret the project. She wrote, “I love my pictures (although it is perhaps a work of supererogation to say so), and that season of public inspection brought much balm to my heart, inasmuch as by the aggregate of individual appreciations, they received their due praise in the multiplicity of points in which they excel.”<sup>88</sup> Her introduction to the exhibition catalogue ends with a call to action. In this, perhaps the exhibition was a success, as spiritualism and spirit drawings would remain a continuous albeit esoteric artistic genre for the next sixty years.

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<sup>87</sup> For more on Hudson and spirit photography see Jen Cadwallader, “Spirit Photography Victorian Culture of Mourning.” *Modern Language Studies* 37, no. 2 (2008): 8–31. and Georgiana Houghton, *Chronicles of The Photographs of Spiritual Beings and Phenomena Invisible to the Material Eye: Interblended with Personal Narratives* (London: E.W. Allen, 1882).

<sup>88</sup> Houghton, *Evenings at Home: Second Series*, 91.

Emerging scholarship surrounding Houghton and her inclusion in recent exhibitions speaks to an evolving attempt to decipher her oeuvre. Hilma af Klint began work on her own occult abstraction just twelve years after Houghton's death. Scholars like Henderson have afforded af Klimt a complex intellectual framework, which complicates the narrative of her process and pushes her work past solely automatic non-objective painting. This project applies a similar art historical treatment to Houghton. While Houghton's spirit drawings never reached mainstream acclaim in her lifetime, she nonetheless painted what in her own words were "works of art without parallel in this world."<sup>89</sup> More than an eccentric, Houghton was an artist concerned with both physical and spiritual sight. Influenced by the entangled realities of the scientific occult, she used art as a means of investigating the multidimensional potentialities of vision in her time.

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<sup>89</sup> Houghton, *Evenings at Home: Second Series*, 76.

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## IMAGES



Figure 1: Georgiana Houghton, *The Eye of The Lord*, dated September 22nd, 1862, watercolor and gouache on paper, 32.5 x 23.5 cm, image sourced via *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. North Melbourne: Victorian Spiritualists' Union, 2020. Page 37.



Figure 2: Georgiana Houghton, *The Flower and Fruit of Henry Lenny*, dated August 28th 1861, watercolor on paper, 51 x 42cm, image sourced via *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. North Melbourne: Victorian Spiritualists' Union, 2020. Page 13.



Figure 3: Georgiana Houghton, *The Sheltering Wing of The Most High*, dated October 2nd 1862, watercolor and gouache on paper, 23.0 x 31.5cm, image sourced via *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. North Melbourne: Victorian Spiritualists' Union, 2020. Page 45.

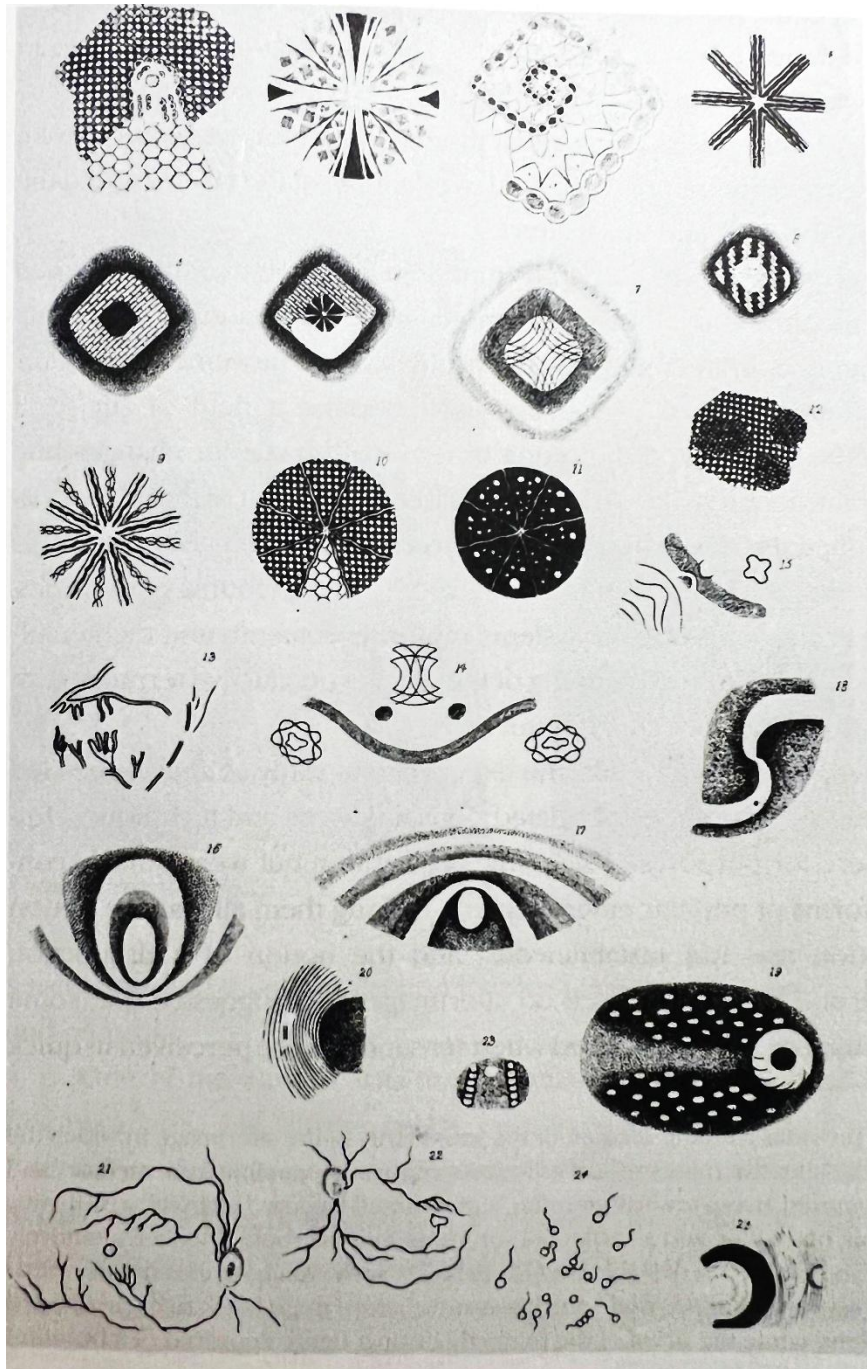


Figure 4: Jan Purkinje *Afterimages*, 1823, image sourced via Jonathan Crary *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. Cambridge, Mass: MIT Press, 1990, page 103.



Figure 5: Georgiana Houghton, *The Eye of God*, dated September 25<sup>th</sup> 1862. watercolor and gouache on paper, 54 x 44 cm, image sourced via *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. North Melbourne: Victorian Spiritualists' Union, 2020. Page 41.



Figure 6: Georgiana Houghton, *Glory Be to God*, dated July 5th, 1864, watercolor and gouache on paper, 22 x 32cm, image sourced via *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. North Melbourne: Victorian Spiritualists' Union, 2020. Page 89.

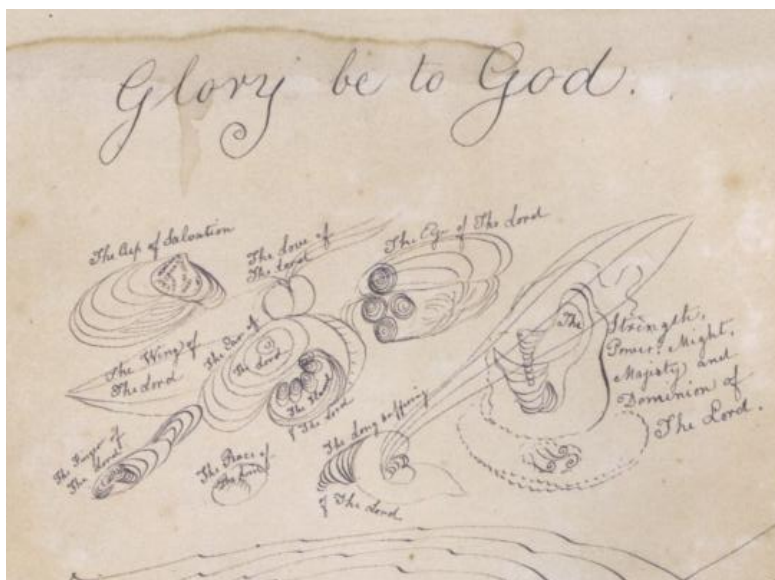


Figure 7: Georgiana Houghton, detail from verso of *The Eye of God* image sourced via *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. North Melbourne: Victorian Spiritualists' Union, 2020. Page 90.



Figure 8: Georgiana Houghton, *The Monogram of Cromwell Varley*, dated September 15<sup>th</sup>, 1869, watercolor and gauche on paper, 24.5 x 35.0 cm, image via *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. North Melbourne: Victorian Spiritualists' Union, 2020. Page 129.



Figure 9: Georgiana Houghton, *The Eye of the Lord*, dated September 1<sup>st</sup>, 1870, watercolor and gouache on paper, 25.0 x 35.0 cm, image via *Georgiana Houghton: A Gift from Spirit: Catalogue of Works Held at the Victorian Spiritualists' Union*. North Melbourne: Victorian Spiritualists' Union, 2020. Page 133.

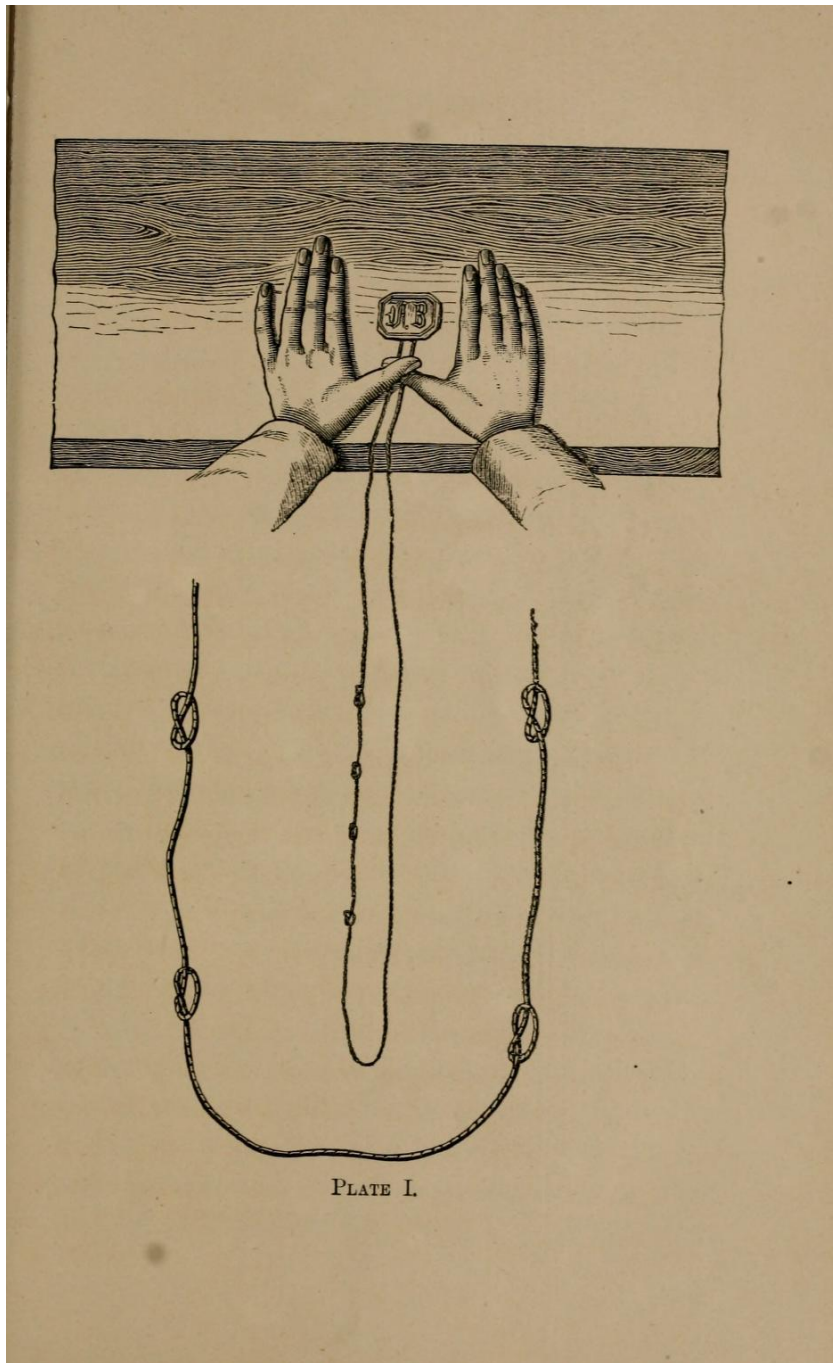


Figure 10: Plate 1 from *Transcendental physics: An account of experimental investigations from the scientific treatises of Johann Carl Friedrich Zöllner*. Translated by Charles Carleton Massey, London: W.H. Harrison, 1880. Page 15.